REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-9 remain in the application. Claims 1, 4, and 7 have been amended.

In the section entitled "Specification Objections" on page 2 of the above-identified Office action, the specification has been objected to because of the alleged informalities.

Appropriate correction has been made with regard to the alleged grammatical and punctuation errors. The terminology "code transmitter" has now been used consistently. The reference to "Sz" has been deleted.

With regard to the terminologies "station" and "item," it is believed that these two terminologies are very commonly used terms and a person skilled in the art should have no difficulty to understand them. A "distant station for evaluation" clearly means a place or location where the evaluation is performed. A "coded information item" clearly means a piece of information that is coded.

In item 1 on pages 3-4 of the above-mentioned Office action, claims 1-2, 4, and 7 have been rejected as being unpatentable over Kirchlinde et al. (US Pat. No. 6,577,227) in view of Nalbandian et al. (US Pat. No. 6,509,873) under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references. However, the language of the claims has been amended in an effort to even more clearly define the invention of the instant application.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

> a vehicle-mounted transceiver unit for emitting an interrogation signal, said transceiver unit having an antenna unit emitting a wave having one of an elliptical polarization and a circular polarization and the wave including the interrogation signal;
>
> a portable code transmitter transmitting back a response signal if said code transmitter receives the interrogation signal having one of the elliptical polarization and the circular polarization. (Emphasis added.)

Claim 4 calls for, inter alia:

> using a vehicle-mounted transceiver unit for emitting an interrogation signal provided in a wave having one of an elliptical polarization and a circular polarization;
>
> receiving the interrogation signal having one of the elliptical polarization and the circular polarization in a portable code transmitter. (Emphasis added.)

Claim 7 calls for, inter alia:

> receiving an interrogation signal in a wave having one of an elliptical polarization and a circular polarization in a portable code transmitter and transmitting back a response signal as a wave having one of an elliptical polarization and a circular polarization. (Emphasis added.)

The Kirchlinde et al. reference is owned by the corporate assignee of the instant application and Applicants are therefore very familiar with this reference.

Kirchlinde et al. disclose a conventional anti-theft protection system for a motor vehicle with a vehicle-mounted transceiver unit which transmits an interrogation signal. If the code transmitter 1 receives the interrogation signal, a response signal is sent back to the vehicle 5 via its transceiver 4. In Kirchlinde et al. there is no hint as to the use of circularly polarized waves for transmitting the signals. These waves were thus far not used for the transmission between motor vehicle and code transmitter since their production is costly and the receiver must also be more

expensive. Naturally, circularly polarized waves have been known for a long time.

The Examiner has also admitted that Kirchlinde et al. fail to teach that the antenna of the transceiver (6) emits a signal having either an elliptical or circular polarization. However, the Examiner has further stated that Nalbandian et al. suggest an antenna that emits a waving having either an elliptical or circular polarization.

Nalbandian et al. disclose an antenna for transmitting broadband signals having circular polarization. The signals are transmitted to the antenna via a microstrip. Such antennas are used for transmitting circularly polarized waves in the microwave frequency range (gigahertz range) to airplanes or satellites during the flight or for transmitting circularly polarized waves therefrom (see column 1, lines 30-33). These signals must be transmitted in the microwave frequency range (see column 3, lines 60-64) and have a wide range. They cannot be used in a motor vehicle for admission control because short ranges are required here. Only the user who is near the motor vehicle with his code transmitter should have access to his motor vehicle. Only the code transmitter in the vicinity of the vehicle should be able to receive the interrogation signal from the vehicle. Thus, only a

transponder/code transmitter in the immediate vicinity of the motor vehicle should be able to be addressed. The risk of interception (tapping) is therewith reduced.

One should also not be able to tap these signals illegally and then reproduce them in order to gain illegal access to the vehicle. That is why in the invention of the instant application the signals are transmitted in an elliptical or circularly polarized wave. If someone who would like to tap the signals illegally does not know that the signals are circularly polarized, the complete recording of the signals will fail.

The code transmitter only responds with a response signal when it has received an elliptical or circularly polarized wave. Thus it is necessary that the code transmitter be equipped accordingly and have an antenna which, in all of the three space directions, can evaluate the field strength of the arriving signals (coils 21, 22 and 23 in Fig. 3). It is only when the code transmitter has received the elliptical or circularly polarized wave that it produces a response signal which can also be transmitted back to the vehicle in an elliptical or circularly polarized manner.

In summary, in Nalbandian et al. only circularly polarized waves are transmitted in the gigahertz range. However, there is no provision outlining that the response signals can only be transmitted back if the signals have also been received in a circularly polarized manner. In Nalbandian et al., the task is only to transmit signals securely to moving objects over long distances and to receive signals from them. This is only possible if circularly polarized waves are used.

Thus far, no circularly polarized waves have been used in anti-theft protection systems, but solely linearly polarized waves which are easily producible since all requirements were fulfilled therewith. However, linearly polarized waves can easily be tapped so that they can be illegally reproduced in order to gain access to the vehicle. For that reason, the position of the code transmitter was determined and only when the code transmitter was nearby the vehicle in a bi-directional dialog between the motor vehicle and the code transmitter and the authorization was proven, was access then allowed.

In Nalbandian et al., a totally different problem is addressed. For this reason, Applicant believes that the two documents cannot be combined because in Nalbandian et al. circularly polarized waves are transmitted to very remote and

moving objects at high frequency. This problem does not arise in the invention of the instant application. The code transmitter is neither far away nor has considerable movement. Customarily, the user stands at the door and operates the door handle. In consequence of this operation, the interrogation signal is transmitted.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1, 4, and 7. Claims 1, 4, and 7 are, therefore, believed to be patentable over the art and since claim 2 is dependent on claim 1, it is believed to be patentable as well.

In item 2 on pages 4-5 of the above-mentioned Office action, claim 3 has been rejected as being unpatentable over Kirchlinde et al. in view of Nalbandian et al. and further in view of Daiss et al. (US Pat. No. 6,549,115) under 35 U.S.C. § 103(a).

As discussed above, claim 1 is believed to be patentable over the art. Since claim 3 is dependent on claim 1, it is believed to be patentable as well.

In item 3 on page 5 of the above-mentioned Office action, claims 5 and 8 have been rejected as being unpatentable over Kirchlinde et al. in view of Nalbandian et al. and further in view of Gold (German Patent Application Publication DE 197 18 423 A1) under 35 U.S.C. § 103(a).

As discussed above, claims 4 and 7 are believed to be patentable over the art. Since claims 5 and 8 are dependent on claims 4 or 7, they are believed to be patentable as well.

In item 4 on page 6 of the above-mentioned Office action, claims 6 and 9 have been rejected as being unpatentable over Kirchlinde et al. in view of Nalbandian et al. under 35 U.S.C. § 103(a).

As discussed above, claims 4 and 7 are believed to be patentable over the art. Since claims 6 and 9 are dependent on claims 4 or 7, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-9 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

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